## UNITED STATES BANKRUPTCY COURT SOUTHERN DISTRICT OF NEW YORK

In re:

Chapter 11

CELSIUS NETWORK LLC, et al.,1

Case No. 22-10964 (MG)

Debtors.

Jointly Administered

CELSIUS NETWORK LIMITED and CELSIUS KEYFI LLC,

Plaintiffs,

Adversary Proceeding No. 22-01139 (MG)

v.

JASON STONE and KEYFI, INC.,

Defendants.

# DECLARATION OF RON SABO IN SUPPORT OF CELSIUS' MOTION FOR PRELIMINARY INJUNCTION

- I, Ron Sabo, declare under penalty of perjury:
- 1. I am the Head of Research at Celsius Network Limited ("<u>Celsius</u>"), where I have worked since March of 2021.
- 2. Prior to my time at Celsius, I worked at a company called Sögur. Sögur designed a global digital currency called SGR. I joined Sögur in August 2017 as its Head of Research. In August 2019, I became Sögur's Chief Scientist.

<sup>&</sup>lt;sup>1</sup> The Debtors in these chapter 11 cases, along with the last four digits of each Debtor's federal tax identification number, are: Celsius Network LLC (2148); Celsius KeyFi LLC (4414); Celsius Lending LLC (8417); Celsius Mining LLC (1387); Celsius Network, Inc. (1219); Celsius Network Limited (8554); Celsius Networks Lending LLC (3390); and Celsius US Holding LLC (7956). The location of Debtor Celsius Network LLC's principal place of business and the Debtors' service address in these chapter 11 cases is 121 River Street, PH05, Hoboken, New Jersey (07030).

- 3. Before my time at Sögur, I was an algorithm developer at Cogito Systems in Tel Aviv, Israel from June 2015 until August 2017. While working at both Sögur and Cogito, I was a lecturer in programming at Tel Aviv University in Tel Aviv, Israel.
- 4. I have a PhD in Condensed Matter Physics from the Weizmann Institute of Science, a public research university in Rehovot, Israel. I also have an MBA in Accounting and Finance from Tel Aviv University, a Master's Degree in Physics from the Weizmann Institute of Science, and a Bachelor's Degree in Physics and Mathematics from Tel Aviv University.
- 5. Through my background and industry experience, including as Celsius' Head of Research, I have extensive expertise in cryptocurrency technology (including blockchain technology) and computer programming.
- 6. I submit this declaration (the "<u>Declaration</u>") in support of Celsius' Motion for a Preliminary Injunction. Except as otherwise indicated, all facts set forth herein are based on my personal knowledge and on documents and information available to me based on my work for Celsius.

## I. Relevant Background

7. The term "blockchain" refers to a type of distributed digital ledger system that publicly records transactions between participants within the system in such a way that transactions are verifiable and immutable. Transactions are verifiable such that anyone can download a copy of the blockchain ledger and confirm the accuracy and validity of each and every transaction that has been recorded. Transactions are immutable in the sense that once they are written to the blockchain and enough time has passed, they are cryptographically ensured to be unalterable; this property also makes transactions irreversible. Once a transaction is validated and written to the blockchain ledger, the likelihood it will be reversed decreases exponentially with time, such that proposed transactions may be considered "final" just a few minutes after they are written to the

blockchain. These properties allow the transaction history to be verified by all participants in the blockchain network, so that everyone agrees on the same "state" of the ledger at a given point in time.

- 8. Currently, the most well-known use for blockchain technology is cryptocurrencies such as Bitcoin and Ethereum ("<u>ETH</u>"). Cryptocurrencies (or "crypto") are digital currencies or tokens that can be used to buy goods and services. Crypto uses blockchain to act as both a public ledger and as a cryptographic security system so that online transactions using crypto are always recorded and secured.
- 9. An address on the blockchain (also referred to as a "wallet") can be thought of as loosely analogous to a bank account, in the sense that an individual or entity is able to send and receive crypto through the address. When crypto is transferred, effected through an update to the blockchain ledger, the receiving address is credited while the sending address is debited the amount being transferred. Crypto is "locked" to an address and subsequently controlled through the use of cryptographic keys. While access to the private key is required to move or otherwise control (i.e., send) crypto to a different address on the network, anybody can view the transaction history of a particular address given the verifiable, open, and immutable nature of the blockchain. Because the blockchain is a public, open, and distributed system, anyone is able to view and examine transactions recorded on the ledger.
- 10. The Ethereum blockchain allows for the creation and transfer of digital assets and crypto such as ETH. ETH is the default "token" on Ethereum. It has a current value of approximately \$1,570 as of October 31, 2022. Other digital assets can be created by deploying what is known as a "smart contract" to the blockchain, which is able to define the characteristics of the digital assets (often referred to as "tokens" or "coins"). A smart contract is a package of

computer code that is stored on the blockchain ledger and is deployed by a special type of transaction, allowing participants on the Ethereum blockchain to send and receive tokens such as ETH.

11. As Celsius' Head of Research since March 2021, I am familiar with the different DeFi protocols and deployment opportunities that the defendants Jason Stone and KeyFi, Inc. (together, the "<u>Defendants</u>") utilized while they were employed by Celsius. I also have reviewed the transfers of assets and proceeds that originated from Celsius' wallets and assets.

#### II. Transfers

- 12. I have reviewed the declaration of Shiran Kleiderman, Celsius' Chief Security Officer and Head of IT (the "Kleiderman Declaration"). I understand from the Kleiderman Declaration that, on or around August 19, 2020, (1) Celsius created a digital wallet with the address 0xb1adceddb2941033a090dd166a462fe1c2029484 (the "0xb1" wallet) and transferred 1 ETH to the 0xb1 wallet; (2) that Celsius later transferred substantial additional ETH into the 0xb1 wallet; and (3) that Celsius gave Defendants the private keys to the 0xb1 wallet and certain other Celsius-created wallets (the "Celsius Wallets") to permit Defendants to deploy Celsius' coins as expressly authorized in advance by Celsius.
- 13. To identify and analyze the below-described transactions and transfers originating from the 0xb1 wallet,<sup>2</sup> including transfers of NFTs (to the extent such transactions are publicly visible), I relied on an online platform known as Etherscan. Etherscan is a search engine that allows users to look up, confirm, and validate transactions that have occurred on the Ethereum blockchain. By entering the public key of a wallet into the search box, you can view the balance, value, and all the transactions made through that wallet. I have performed an extensive analysis

<sup>&</sup>lt;sup>2</sup> This Declaration does not identify and analyze all transactions and transfers originating from the 0xb1 wallet. It instead identifies and analyzes only a subset of such transactions selected to illustrate relevant 0xb1 activity.

of transactions visible on Etherscan in connection with preparing this Declaration, and the results are set forth herein. I also relied on a website with the address cryptopunks.app, which provides trustworthy information regarding the purchase, sale, and transfer of cryptopunks, all of which can be corroborated on Etherscan.

- (i) Cryptopunks Purchases, Transfers, and Subsequent Sales
- 14. The records on Etherscan reveal that beginning from January 23, 2021 to February 22, 2021, the 0xb1 wallet began to use ETH to bid for and purchase a series of NFTs called "Cryptopunks"—8-bit images of cartoon figures supposedly inspired by the London punk music scene—eventually buying 15 Cryptopunks with more than 600 Celsius ETH. *See* Exhibit 1 (Spreadsheet of Cryptopunks Purchases).<sup>3</sup>
- 15. As evidenced by the Spreadsheet of Cryptopunks Purchases attached as Exhibit 1, the 0xb1 wallet purchased the following Cryptopunks:

<sup>&</sup>lt;sup>3</sup> There were other bids made from the 0xb1 wallet for Cryptopunks that never materialized to a purchase.

Cryptropunk Number	Purchase Price (ETH)	Purchase Date
8724	10	2/1/2021
3793	8.8	2/3/2021
7844	15	2/8/2021
4975	7	2/8/2021
638	20	2/8/2021
8777	6.25	2/8/2021
5287	7.89	2/8/2021
8472	130	2/11/2021
6784	130	2/11/2021
3489	130	2/11/2021
6124	6.99	2/13/2021
4181	18	2/17/2021
4347	45	2/21/2021
9934	55	2/22/2021
7076	59	2/22/2021

16. To understand the process better, consider one example. On February 11, 2021, the 0xb1 wallet sent 130 ETH to the smart contract that controls the Cryptopunks NFT series (address 0xb47e3cd837ddf8e4c57f05d70ab865de6e193bbb) to purchase a Cryptopunks NFT 3489. See Exhibit 2 (Details of February 11, 2021 Purchase of Cryptopunk). In exchange, a Cryptopunk NFT transferred from the seller's address, was 0xe83c750b2708320bb134796c555b80df39a3d97b, to 0xb1. Id. This transaction is identifiable on the blockchain by its "transaction hash" (or "txn hash") which is a unique 66-character identifier that is generated whenever a transaction on the blockchain is created. The transaction hash for this purchase 0xa28c464f931c9fba7ef090f27ca0ddd specific is b6bf0137b0400745f51c0aaf3d4e82dd3. Id.

17. Shortly thereafter, beginning on March 16, 2021, the 0xb1 wallet began transferring the 15 purchased Cryptopunks, along with two additional Cryptopunks (#970 and #864), to a wallet with the address 0x50dd57f50a17d57304e7a4f262da30beb31c2e87 (the "0x50dd" wallet). See Exhibit 3 (Spreadsheet of Cryptopunk Transfers). The 0xb1 wallet transferred the following Cryptopunks to the 0x50dd wallet:

Cryptopunk Number	Transfer Date
8724	3/16/2021
3793	3/16/2021
7844	3/16/2021
4975	3/16/2021
638	3/16/2021
8777	3/16/2021
6124	3/16/2021
4181	3/16/2021
4347	3/16/2021
9934	3/16/2021
7076	3/16/2021
864	3/16/2021
970	3/16/2021
5287	3/17/2021
8472	5/3/2021
6784	5/3/2021
3489	5/3/2021

18. At least four of the transferred Cryptopunks were subsequently sold from the 0x50dd wallet. Specifically, on April 5, 2021, the controller of the 0x50dd wallet listed Cryptopunk 6124 for sale, and it was sold on April 8 for 19 ETH (worth around \$39,273 at the time), a profit of approximately 12 ETH. On April 10, 2021, the controller of the 0x50dd wallet listed Cryptopunk 638 for sale, and it was sold on the same day for 130 ETH (worth around \$277,363 at the time), a profit of 110 ETH. A few months later, on July 30, 2021, the controller of the 0x50dd wallet listed Cryptopunk 8472 for sale. This Cryptopunk was sold the same day for

the listed price of 700 ETH (worth more than \$1.7 million, a profit of 570 ETH. On August 24, 2021, the controller of the 0x50dd wallet listed Cryptopunk 4347 for sale, and it was sold on August 29, 2021 for 222 ETH (worth more than \$703,000 at the time), a profit of 177 ETH. In total, the four Cryptopunks were sold for 1071 ETH, which was worth around \$2.7 million as of the date of the last sale, a profit of approximately 869 ETH. These sales are all summarized in Exhibit 4 (Transaction Histories for Cryptopunks 6124, 638, 8472, and 4347).

#### (ii) Bullrun Babes Purchases

- 19. On February 19, 2021, the 0xb1 wallet transferred 300 Celsius ETH to a wallet with the address 0x1ceb38874b44e2b3a87b2d1204bc2b989529ed14 (the "0x1c" wallet). *See* Exhibit 5 (Transfer of 300 ETH to 0x1c). On the same day, the controller of the 0x1c wallet began purchasing numerous NFTs, most of which consist of a NFT collection known as "Bullrun Babes." *See* Exhibit 6 (Spreadsheet of Bullrun Babes Transfers). Bullrun Babes have been described as "digital collectibles that showcase female characters based on popular products or people within the blockchain space."
- 20. Exhibit 6 sets forth the relevant details of the transactions of the 0x1c wallet involving the Bullrun Babes NFTs, beginning on February 19. To help the Court understand the details contained on this spreadsheet, it would be helpful to consider an example. The purchase from the 0x1c wallet set forth on row 17 of the spreadsheet can be identified with the transaction hash of 0x583d2b2432686699e7f9dc4dad5a2b7aa34a36e369a0fad0f998f271f58c3c47 (the "0x583" transaction). The details of the 0x583 transaction, which are visible on the blockchain through Etherscan and attached as Exhibit 7, show that a sale of an NFT occurred on OpenSea, which is the largest online marketplace for NFTs. The controller of the 0x1c wallet initiated a smart contract that triggered the transfer of 3.135 ETH to a wallet with the address of

0xba11610e28406a4cd34d9e993edd9e7f2ea90d53. In return, a "BullrunBabes" token (which refers to a Bullrun Babes NFT) was transferred from 0xba11610e28406a4cd34d9e993edd9e7f2ea90d53 to the 0x1c wallet. *See* Exhibit 7 (0x583 Bullrun Babes Purchase Transaction Details).

- 21. As noted, this is just one example. The blockchain shows that the 0x1c wallet engaged in at least 87 purchases of Bullrun Babes on February 19 alone. *See* Exhibit 6 (Spreadsheet of Bullrun Babes Transfers).
- 22. On February 27, 2021, the 0xb1 wallet transferred another 150 ETH to the 0x1c wallet. See Exhibit 8 (Transfer of 150 ETH to 0x1c). The 0x1c wallet then proceeded to purchase more Bullrun Babes. For example, the blockchain shows that on March 3, 2021, the 0x1c wallet sent 1.9 ETH to 0x56d77f1a33ed49a82b4960a10435cdd5d2652340 in exchange for a Bullrun Babes NFT through OpenSea. See Exhibit 9 (Transaction Details of March 3 Bullrun Babes The Purchase). transaction hash for that particular transaction is 0x7aa7949bd58a977ffcfe064c3a32880e9a7700e68b698f2773eacd3b20d14d85. The 0x1c wallet made 6 purchases of Bullrun Babes on March 3, including the purchase just described. See Exhibit 6 (Spreadsheet of Bullrun Babes Transfers).
- 23. On March 19, the 0x1c wallet proceeded to transfer 67 Bullrun Babes to a wallet with the address of 0xe25c8cbe119c55dcef5ea372771f9365f52a115d (the "0xe25" wallet). *See id.*

#### (iii) Other NFT Purchases

24. In addition to the purchases and transfers of Cryptopunks and Bullrun Babes described above, the 0xb1 wallet purchased hundreds of other NFTs.

### (iv) Transfers of ETH from Celsius

- 25. The 0x1c wallet also transfered ETH—all supplied by transfers from the 0xb1 wallet—to various other addresses. *See* Exhibit 10 (Transfers of ETH from 0x1c). Specifically, as shown on Exhibit 10, on March 19, 2021, the 0x1c wallet initiated two separate transfers of ETH—a transfer of 1 ETH and 29 ETH—to the 0xe25 wallet. Subsequently, on March 20, 2021, the 0x1c wallet transferred another 15 ETH to the 0xe25 wallet, and on April 7, 2021, another 10.29 ETH to the 0xe25 wallet. *Id*.
- 26. Separately, on March 10, 2021, the 0xb1 wallet transferred 20 ETH to the 0x50dd wallet. *See* Exhibit 11 (Transfer of ETH from 0xb1 to 0x50dd).

#### (v) Transfers to Tornado Cash

- 27. The blockchain reveals that, in addition to all of the unauthorized transfers and purchases made from the 0xb1 wallet and other wallets, these wallets also regularly used a money laundering application known as Tornado Cash to obfuscate the origin, destination, and counterparties of transactions.
- 28. Tornado Cash is an Ethereum privacy protocol "mixer" that "masks" the path of ETH that is transferred from a sender to a receiver on the blockchain. When a user deposits ETH to Tornado Cash, it allows them to withdraw the ETH through a wallet with a different public key, or address. There is no way to link the withdrawal to the initial deposit of ETH, thus providing complete privacy. Tornado Cash has been widely known in the industry as a tool to launder cryptocurrency. On August 8, 2022, the U.S. Department of Treasury announced that OFAC has placed Tornado Cash on its SDN List, and that "all transactions by U.S. persons or within (or transiting) the United States with Tornado Cash are prohibited." According to Treasury, this severe

sanction was warranted because Tornado Cash is "commonly used by illicit actors to launder funds, especially those stolen during significant heists."

29. My investigation has uncovered the following. On May 23, 2021, the 0x50dd wallet made a transfer of 100 ETH to the Tornado Cash smart contract address. See Exhibit 12 (Tornado Cash Transfers Spreadsheet). Also on May 23, a transfer from a wallet with the address of 0xfc2a616d48a8681250aaaf590404e20812e96cfa (the "0xfc2" wallet) made a transfer of 100 ETH to Tornado Cash. *Id.* The transaction history of the 0xfc2 wallet reveals that the wallet was initially funded with a transfer of 200 ETH from the 0xb1 wallet on February 19, 2021. See Exhibit 13 (Transaction History of 0xfc2 from Feb. 19 to Feb. 21). Subsequently, the controller of the 0xfc2 wallet began making purchases of various NFTs, including purchases of various Cryptopunks that had been collected using funds from the 0xb1 wallet. See id. Other notable transfers to Tornado Cash include: (1) a transfer of 100 ETH on May 25, 2021 from the 0xfc2 wallet to Tornado Cash; (2) two separate transfers of 10 ETH from the 0x50dd wallet to Tornado Cash on May 25, 2021 (3) two separate transfers of 100 ETH from the 0x50dd wallet to Tornado Cash on October 12, 2021; and (4) nearly three dozen additional, separate transfers of 10 ETH from the 0xfc2 and 0x50dd wallets between November 2021 and January 2022. See Exhibit 12 (Tornado Cash Transfers Spreadsheet).

#### (vi) The Theft of \$1.4 Million DAI Routed Through Tornado Cash

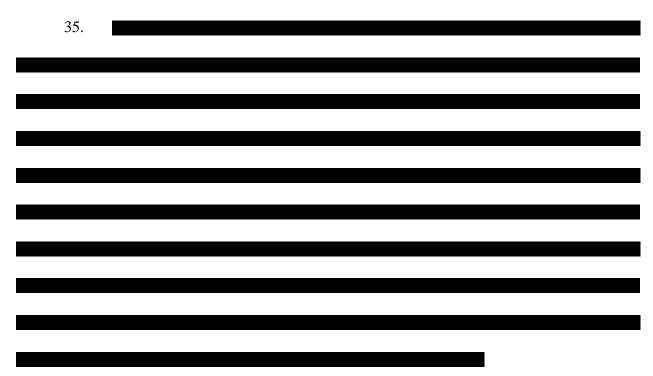
30. On September 17, 2021, an airdrop of approximately \$1.4 million worth of DAI, a cryptocurrency pegged to the value of the U.S. dollar, was made to the 0xb1 wallet. *See* Exhibit 14 (Transaction Details of Sept. 17, 2021 Airdrop of DAI). Any party on the blockchain can freely airdrop items to a wallet without notice to or permission from the wallet owner, and Celsius did not become aware of the transaction when it occurred.

- 31. On September 21, 2021, the approximately \$1.4 million worth of DAI was transferred of the 0xb1wallet wallet with out to a public kev 0x8cc24e59e29a0f9b46f1746b392eaf2483d75096 (the "0x8cc" wallet). See Exhibit 15 (Transfer of DAI from 0xb1 to 0x8cc).
- 32. After receipt of the DAI, the controller of the 0x8cc wallet interacted with a smart contract to allow the smart contract to send the DAI through the "linch" network. *See* Exhibit 16 (Transaction Details of Smart Contract with 1inch). 1inch is a decentralized crypto exchange aggregator that searches through dozens of decentralized crypto exchanges to allow users to find the most favorable exchanges for tokens. Simply put, it allows users to exchange one form of crypto currency to another, akin to a currency exchange. Through three different transactions, the controller of the 0x8cc wallet was able to convert the approximately \$1.4 million worth of DAI into approximately 485 ETH. *See* Exhibit 17 (Three Conversions of DAI into ETH demonstrating (i) approximately 452k DAI converted to approximately 159 ETH, (ii) 450k DAI converted to approximately 173 ETH).
- 33. Then, in 17 separate transfers beginning on September 22, 2021 and concluding on October 12, 2021, the 0x8cc wallet transferred a total of 485 ETH to Tornado Cash. *See* Exhibit 18 (0x8cc Transaction History); *see also* Exhibit 19 (0x722) (showing 0x722122df12d4e14e1 3ac3b6895a86e84145b6967, the wallet address listed in Exhibit 18, is the Tornado Cash smart contract address).

#### III. Celsius' 25,000 Staked ETH

34. On November 24, 2020, the 0xb1 wallet transferred 25,000 ETH to a wallet with the address 0x3fb9d44bc83d0da2902e6230aed42fc219f8a426 (the "0x3fb9" wallet). *See* Exhibit 20 (Nov. 24, 2020 Transfer from 0xb1 to 0x3fb9). Hours later, in five separate transfers,

a total of 24,960 ETH (the "Celsius Staked ETH") were processed through a smart contract (with the address 0x39dc6a99209b5e6b81dc8540c86ff10981ebda29) and deposited to the Ethereum staking deposit smart contract with the address 0x00000000219ab540356cBB839Cbe05303d7705Fa (the "Staking Smart Contract"). See Exhibit 21 (Spreadsheet of Five Transfers to Staking Smart Contract Address). The Celsius Staked ETH became locked at the time it was deposited into the Staking Smart Contract. With interest, Celsius estimates that the Celsius Staked ETH now totals approximately 27,500 ETH, which remains locked in the Staking Smart Contract for now and continues to accrue interest.



36. The Celsius Staked ETH will remain locked and unavailable for withdrawal until the Ethereum network is upgraded to support withdrawals of staked ETH (the "<u>Upgrade</u>"). This process is underway. For example, the so-called "Merge"—a long awaited transition of the

<sup>&</sup>lt;sup>4</sup> See also Exhibit 22 (Address as Eth2 Depositor) (Etherscan pages showing the 0x39dc6a99209b5e6b81dc8540c86ff10981ebda29 smart contract processed ETH to Eth2 deposit smart staking contract, with the ultimate address being 0x00000000219ab540356cBB839Cbe05303d7705Fa).

Ethereum blockchain from a proof-of-work mechanism to a proof-of-stake mechanism—occurred on September 15, 2022. Still, substantial work by software developers, operators, and validators remains to be done before the Upgrade can occur, and it is currently estimated that the Upgrade will not be finished until early 2023. Moreover, the details of how and when staked ETH will be unlocked have not yet been finalized, and it is possible that the Celsius Staked ETH will not be immediately, or entirely, available for withdrawal even when the Upgrade occurs. Ultimately, no one knows, or can know, exactly when the Upgrade will be complete, or exactly when the Celsius Staked ETH will be unlocked. While it is very unlikely that the Celsius Staked ETH will imminently be unlocked and available for withdrawal, the possibility of Celsius Staked ETH becoming unlocked in the first quarter of 2023 cannot be ruled out.

- As noted, 24,960 ETH were transferred to the Staking Smart Contract, not the full 25,000 that the 0xb1 wallet had transferred to the 0x3fb9 wallet. Of the remaining ETH in the 0x3fb9 wallet, 37.4 ETH were deposited into the binance exchange (by first transferring them to a different wallet with the address 0xe0de55d82142F6735c4F168093150E785Eb3635A (the "0xe0d" wallet), see Exhibit 23 (Details of 0xe0d Transfer)) and then to an address identified as controlled by Binance. See Exhibit 24 (Details of Binance Transfer). Binance is a cryptocurrency exchange where, unlike wallets on other platforms, the transactions conducted via the Binance platform are not visible to anyone other than the user of the wallet and Binance itself. As a result, Celsius is not aware what happened to the 37.4 ETH. As for the remaining 2.6 ETH in the 0x3fb9

wallet, 2 ETH were transferred to yet another wallet with the address

0x04e16b2919cf639d0d0b046f550771376174a81d (the "0x04e" wallet). See Exhibit 25 (Details

of Transfer of 2 ETH to 0x04e). The last of the 0.6 ETH were then transferred to the 0xb1 wallet

on December 17, 2021. See Exhibit 26 (Details of Transfer of 0.6 ETH from 0x04e to 0xb1).

I declare under penalty of perjury pursuant to 28 U.S.C. § 1746 that the foregoing is true

and correct to the best of my knowledge and belief.

Dated: November 1, 2022

—DocuSigned by

Ron Sabo